

Claims

1. Railway rail for guiding a wheel of a rail guided vehicle, said rail comprising a body having a running surface for cooperation with a wheel to be
5 guided and non-running surface provided with a plurality of perforations extending from one part of the non-running surface to another part of the non-running surface, the average distance between two adjacent perforations being less than twice the diameter of the smallest enclosing circle of the cross sectional profile normal to the longitudinal axis of the rail, the perforations
10 being provided to, in use, reduce the capacity of the railway rail to reduce rolling noise.
2. Railway rail according to claim 1, wherein the average distance D1 is comprised between 5 and 80 mm.
3. Railway rail according to claim 1 or 2, wherein the diameter of an
15 average perforation is more than a tenth of the length of the perforation channel.
4. Railway rail according to any of the proceeding claims, wherein the average distance D2 between any perforation and the nearest external boundary is less than 80 mm.
- 20 5. Railway rail according to claim 4, wherein the average distance D2 between any perforation and the external boundary is smaller than 50 mm.
6. Railway rail according to any of the preceding claims, wherein the rail comprises a profiled, longitudinally extending bar, having a cross section that is built up of a foot portion that is connected to a head portion via a web
25 portion.
7. Railway track, comprising at least two substantially parallel disposed rails according to any of the preceding claims, the rails being supported by a base body.

8. Railway track according to claim 7, wherein the base body is provided with at least two recessed channels in each of which a rail is received such that the running surface of the rail lies free.

9. Method of reducing the capacity of a railway rail to generate rolling
5 noise, comprising the step of perforating a body portion of the rail such that a plurality of perforations is formed, the average distance between two adjacent perforations being less than twice the diameter of the smallest enclosing circle of the rail cross sectional profile of the rail normal to the longitudinal axis of the rail.

10 10. Method according to claim 9, wherein the perforations are provided by rolling core portions into a steel bar.

11. Use of perforations in a body portion of a railway rail to reduce the capacity of the railway rail to generate rolling noise.

12. Use according to claim 11, wherein the perforations extend from one
15 part of a non-running surface of a body portion to another part of the non-running surface of the body portion.

13. Use according to claim 11 or 12, wherein the average distance between two adjacent perforations is less than twice the diameter of the cross-sectional profile normal to the longitudinal axis of the rail.

20 14. Use of a railway rail having perforations in its body portion in a railway track to reduce the capacity of the railway track to generate rolling noise.

15. Use according to claim 14, wherein the perforations extend from one part of a non-running surface of the body portions to another part of the non-
25 running surface of the body portion.

16. Use according to claim 14 or 15, wherein the average distance between two adjacent perforations is less than twice the diameter of the cross-sectional profile normal to the longitudinal axis of the rail.